WHAT IS CLAIMED IS:

1. A ligand specific for mammalian troponin, wherein the ligand comprises a molecule that binds to a mammalian troponin molecule, but not an avian troponin molecule.

2. The ligand of Claim 1, wherein the mammalian troponin molecule is a troponin I molecule.

3. The ligand of Claim 1, wherein the mammalian troponin molecule is selected from the group consisting of a slow twitch skeletal muscle troponin I molecule and a fast twitch skeletal muscle troponin I molecule.

4. The ligand of Claim 1, wherein the ligand is an antibody and the troponin molecule is a polypeptide.

5. The ligand of Claim 1, wherein the ligand is an antibody produced by immunizing an animal with a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35.

6. The ligand of Claim 1, wherein the ligand binds to a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35.

7. The ligand of Claim 1, wherein the ligand binds to a nucleic acid molecule encoding a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35.

8. The ligand of Claim 1, wherein the ligand is specific for an equine troponin I protein, a porcine troponin I protein, a bovine troponin I protein, or a combination thereof.

9. An antigen for the production of an antibody specific for a mammalian troponin molecule, wherein the antigen comprises an isolated peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35, wherein the antibody is not specific for an avian troponin molecule

10. An assay for detecting a mammalian troponin molecule in a sample, the assay comprising:

a) reacting the sample with a ligand that is specific for the mammalian troponin molecule and not specific for an avian troponin molecule for a time and under conditions sufficient to form a complex between the ligand and the troponin molecule; and

b) detecting the complex either directly or indirectly as a measure of the presence or amount of the troponin molecule in the sample.

11. The assay of Claim 10, wherein the mammalian troponin molecule is a troponin I molecule.

12. The assay of Claim 10, wherein the mammalian troponin molecule is a troponin I molecule selected from the group consisting of a slow twitch skeletal muscle troponin I molecule and a fast twitch skeletal muscle troponin I molecule.

13. The assay of Claim 10, wherein the ligand is an antibody and the troponin molecule is a polypeptide.

14. The assay of Claim 10, wherein the ligand is an antibody produced by immunizing an animal with a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35.

15. The assay of Claim 10, wherein the ligand binds to a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35.

16. The assay of Claim 10, wherein the ligand binds to a nucleic acid molecule encoding a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35.

17. The assay of Claim 10, wherein the ligand is specific for an equine troponin I protein, a porcine troponin I protein, a bovine troponin I protein or a combination thereof.

18. The assay of Claim 10, wherein the sample is animal feed.

19. A method of making an antibody that is specific for a mammalian troponin molecule and not specific for an avian troponin molecule, comprising administering to an animal an immunogenic amount of a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS:2-6, 9-13, and 15-35.